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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	AT	TORNEY DOCKET NO.	
_		٦	E	EXAMINER	
			ART UNIT	PAPER NUMBER	
			DATE MAILED:		

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No. 08/952,996

Applicant(s)

Leijon et al.

Examiner

Enad, Elvin

Group Art Unit 2834



Responsive to communication(s) filed on Apr 10, 1998	
This action is FINAL.	
Since this application is in condition for allowance except for is accordance with the practice under Ex parte Quayle, 1935	C.B. 17, 400 010.
A shortened statutory period for response to this action is set to slonger, from the mailing date of this communication. Failure to application to become abandoned. (35 U.S.C. § 133). Extension 1.36(a).	expire 3 month(s), or thirty days, whichever a respond within the period for response will cause the
Disposition of Claims	is/are pending in the application.
X Claim(s) <u>1-29 and 31-44</u>	is/ore periodical in the appropriate
Of the above, claim(s)	is/are withdrawn from consideration.
Claim(s)	is/are allowed.
X Claim(s) 1-29 and 31-44	is/are rejected.
Claim(e)	is/are objected to.
Claims	are subject to restriction or election requirement.
Application Papers See the attached Notice of Draftsperson's Patent Drawin The drawing(s) filed on	is approved disapproved. under 35 U.S.C. § 119(a)-(d). of the priority documents have been mber) e International Bureau (PCT Rule 17.2(a)).
Attachment(s) X Notice of References Cited, PTO-892 X Information Disclosure Statement(s), PTO-1449, Paper I Interview Summary, PTO-413 Notice of Draftsperson's Patent Drawing Review, PTO-9 Notice of Informal Patent Application, PTO-152	
SEE OFFICE ACTION ON	I THE FOLLOWING PAGES

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DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed November 28, 1997, fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: In figure 1, reference number "9" is not described anywhere in the specification. Moreover, the specification fails to describe figure 6. Correction is required.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. Moreover, the specification is objected to since it fails to describe figure 6. Correction is required.

Claim Objections

4. Claims 2-20 and 21-27 are objected to because of the following informalities: These claims being dependent claims should begin the first sentence with --- The--- instead of "A". Appropriate correction is required.

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Claim Rejections - 35 USC § 112

- 5. Claims 3,24, 25 and 32 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In claim 3, support for the core being comprised of "at least one of laminated sheet and cast iron and powder-based iron and forged iron..." or in claim 24, "the at least one generator being arranged for at least one of two and four poles" cannot be found in the specification. Also support for claim 32 cannot be found in the specification.
- 6. Claims 1,5,9,29,32,34,37 and 39-42 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, the use of the term "substantially" makes the claim vague and indefinite; it is impossible to determine how much the coefficient of thermal expansion of the solid insulation should be in order to be "substantially the same". Claims reciting a similar language are found in claims 5,9,11,29,34,37 and 39. In claim 34, use of the terminology "sufficient" makes the claim vague.

In regard to claims 40-42, the claims are indefinite since they fail to describe the means to perform the respective functions.

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Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1-9,11,12 and 15-44 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant Disclosed Prior Art Figure 3 in view of Elton et al. (USP 5,036,165).

Prior art figure 3 discloses the claimed invention except for having a winding comprising of an insulation system and at least two semiconducting layers, the layers having substantially the same coefficient of thermal expansion.

Elton et al. teach that it is known to have an electrical cable comprising an internal grading layer of semi-conducting pyrolyzed glass fiber layer in electrical contact with the cable conductor. In another form of embodiment, Elton et al. teach an electrical cable provided with an exterior layer of internal grading layer of semi-conducting pyrolyzed glass fiber layer in contact with an exterior cable insulator with a predetermined reference potential.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the cable assembly of Elton et al. to the device as disclosed in prior art figure 3 since such a modification according to Elton et al. would provide a conductor which prohibits the development of corona discharge.

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9. In regard to forming the semiconducting layer with the same coefficient of thermal expansion as that of the insulation layer, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have formed these layers with similar coefficients since it was known in the art that the expansion rate of the two layers would be the same and this is desirable in order to prevent cracking of the insulation and wear between the two.

10. Claim 10 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant Disclose prior art Figure 3 in view of Elton et al. (USP 5,036,165) and further in view of Nikitin et al. (USP 4,429,244).

Prior art figure 3 and Elton et al. disclose the claimed invention except for a teaching of having strands of the electrical conductor comprised of insulated and uninsulated windings.

Nikitin et al. teach having a stator for a generator comprising a housing accommodating a slotted magnetic core 2, a winding composed of two-series connected half windings 7, 8 one half winding being insulated and the other half uninsulated. The high-voltage elements 6 are placed in insulation sleeves 14 which have hollow projections on the internal surfaces and placed between the hollow projections is a thermosetting compound. The part of each insulation sleeve 14 has a cylindrical portion integral with a cone-shaped cable-type termination reinforced with current-carrying layers.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided used the teaching of having insulated and uninsulated electrical

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conductor strands as taught by Nikitin et al. to the device as disclosed by prior art figure 3 and Elton et al. since such a modification according to column 1, lines 61-64 of Nikitin et al. would reduce the amount of insulation and the number of electrical connections required in the end windings.

11. Claims 13 and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant Disclose prior art Figure 3 in view of Elton et al. (USP 5,036,165) and further in view Lauw (USP 4,982,147).

Prior art figure 3 and Elton et al. disclose the claimed invention except for a teaching of having or not having a step-up transformer in the system device.

Lauw in column 6, lines 50-52 teach that use of transformers to step-up or step down the voltage are contingent upon the requirement of the application. In this instant application, if a voltage higher than 30kV-36kV, it would have been an obvious matter of design choice to one having ordinary skill in the art to utilize a step-up transformer in order to increase and meet the required voltage in the application.

Conclusion

- 12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- 13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elvin Enad whose telephone number is (703) 308-7619.

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14. Any inquiry of a general nature or relating to the status of this application should be directed to the Group Receptionist whose telephone number is (703) 308-1782. The fax phone number for this Group is (703) 305-3431 (32).

Elvin Enad Primary Examiner Art Unit 2834 05.24.99